

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of determining coating status of a ceramic substrate heater in a processing system, the method comprising:
- heating the ceramic substrate heater to a desired temperature;
- ~~exposing the ceramic substrate heater to a reactant cleaning gas to remove a material coating from the ceramic substrate heater in a chamber cleaning during a process;~~
- monitoring optical emission radiating from the heated ceramic substrate heater to determine;
- determining a coating status of the ceramic substrate heater; and
- based upon the status from the monitoring, performing one of the following: and when the determining indicates that the ceramic substrate heater is not sufficiently cleaned, (a) continuing the exposing and monitoring, and when the determining indicates that the ceramic substrate heater is sufficiently cleaned, (b) stopping the process.

2-3. (Canceled)

4. (Original) The method according to claim 1, wherein the monitoring comprises detecting infrared optical emission.

5. (Original) The method according to claim 1, wherein the monitoring comprises comparing the optical emission intensity to a threshold value, the threshold value being a fixed intensity value or a ratio of the optical emission intensity and an initial optical emission intensity.

6. (Original) The method according to claim 1, wherein the performing (b) comprises stopping the process after a threshold value has been reached.

7. (Original) The method according to claim 1, wherein the heating comprises heating a ceramic substrate heater supporting a substrate.

Application No. 10/811,574
Response dated October 10, 2008October 10, 2008 to
Final Office Action mailed July 10, 2008

8. (Currently Amended) A method of determining coating status of a ceramic substrate heater in a processing system, the method comprising:

determining a threshold value of an optical emission intensity for the ceramic substrate heater, including determining the optical emission intensity radiating from the ceramic substrate heater having no coating formed thereon;

heating the ceramic substrate heater having a material coating formed thereon to a desired temperature;

exposing the heated ceramic substrate heater to a reactant cleaning gas to remove the material coating from the ceramic substrate heater in a chamber cleaning during a process;

monitoring a measured value of optical emission radiating from the heated ceramic substrate heater during the process and comparing the measured value to the threshold value to determine;

determining a coating status of the ceramic substrate heater from the monitoring and comparing; and

stopping the process when the determining indicates that the measured value is approximately equal to the threshold value.

9-19. (Canceled)